

PATENT COOPERATION TREATY

From the
INTERNATIONAL SEARCHING AUTHORITY

To:

SEO, CHEON-SEOK

Seo International Law And Patent Office. 8th Floor KAIS
SYSTEM Bldg., 1657-5, Seocho-dong, Seocho-gu, Seoul 137-
070, Republic of Korea

PCT

**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

(PCT Rule 43bis.1)

Date of mailing
(day/month/year) **27 OCTOBER 2004 (27.10.2004)**

Applicant's or agent's file reference
OG04-003

FOR FURTHER ACTION
See paragraph 2 below

International application No.
PCT/KR2004/000355

International filing date (day/month/year)
20 FEBRUARY 2004 (20.02.2004)

Priority date(day/month/year)
30 JANUARY 2004 (30.01.2004)

International Patent Classification (IPC) or both national classification and IPC
IPC7 H02J 7/35

Applicant

SOLEITEC CO. LTD. et al

1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☐ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☐ Box No. VIII Certain observations on the international application

2. **FURTHER ACTION**

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.
For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the ISA/KR



Korean Intellectual Property Office
920 Dunsan-dong, Seo-gu, Daejeon 302-701,
Republic of Korea

Facsimile No. 82-42-472-7140

Authorized officer

JEON, Yong Hai

Telephone No. 82-42-481-5657



**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.

PCT/KR2004/000355

Box No. I Basis of this opinion

1. With regard to the **language**, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ This opinion has been established on the basis of a translation from the original language into the following language _____, which is the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23.1(b)).
2. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:
 - a. type of material
☐ a sequence listing
☐ table(s) related to the sequence listing
 - b. format of material
☐ in written format
☐ in computer readable form
 - c. time of filing/furnishing
☐ contained in the international application as filed.
☐ filed together with the international application in computer readable form.
☐ furnished subsequently to this Authority for the purposes of search.
3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4. Additional comments:

**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.

PCT/KR2004/000355

**Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability;
citations and explanations supporting such statement**

1. Statement

Novelty (N)	Claims	1 - 23	YES
	Claims	None	NO
Inventive step (IS)	Claims	4 - 15, 17 - 23	YES
	Claims	1 - 3, 16	NO
Industrial applicability (IA)	Claims	1 - 23	YES
	Claims	None	NO

2. Citations and explanations :

Reference is made to the following documents:

D1: KR 2000-0019144 A

D2: JP 10-341032 A

Novelty

Claims 1-23 comply with the requirement of novelty as set forth in PCT Article 33(2).

Inventive Step

Claims 4-15 and 17-23 comply with the requirement of inventive step as set forth in PCT Article 33(3).

However, claims 1-3 and 16 do not comply with the requirement of inventive step as set forth in PCT Article 33(3). The reasons are as follows:

D1 discloses a device using a portable multi-voltage solar cell comprising: more than one solar cell panel which is arrayed and molded by heat resistant polymer; a surface film which is molded by heat resistant polymer for preventing the solar cells from physical breakage; power selecting means which selects more than one solar cell among the said solar cells; and a portable case. D2 discloses EVA(Ethylene Vinyl Acetate) which is heat resistant polymer. Though neither D1 nor D2 discloses a power regulator which automatically detects load voltage and supplies power to the load from a solar battery, it is a part of general knowledge of the art in the field, so a person skilled in the technical field of the present invention would arrive at the subject matter of claims 1-3 and 16 without the exercise of inventive skill by simply combining the teachings of D1 and D2.

Consequently, the subject matter of claims 1-3 and 16 does not possess an inventive step.

Inventive Applicability

Claims 1-23 comply with the requirement of industrial applicability as set forth in PCT Article 33(4).